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10/092,168	03/06/2002	Sridhar Satuloori	5681-08800	9232
75	90 08/25/2006		EXAM	INER
Robert C. Kowert			ZHEN, LI B	
Conley, Rose, &	k Tayon, P.C.			
P.O. Box 398		ART UNIT	PAPER NUMBER	
Austin, TX 78767			2194	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commence	10/092,168	SATULOORI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Li B. Zhen	2194				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim 17 rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	L. ely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on <u>02 Jules</u> This action is FINAL . 2b) ☐ This Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-14 and 16-53 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14 and 16-53 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	n from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 						
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	(PCT Rule 17.2(a)).	•				
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) X Notice of References Cited (PTO-892) X Notice of Draftsperson's Patent Drawing Review (PTO-948)	SUPERVIS 4) Interview Summary (Paper No(s)/Mail Date	e				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa	tent Application (PTO-152)				

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DETAILED ACTION

1. Claims 1 – 14 and 16 – 53 are pending in the application.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 1 8, 11 14, 16 21, 24 35, 38 48 and 51 53 are rejected under
 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication

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No. 2003/0023953 to Lucassen et al. [hereinafter Lucassen, cited in the previous office action] in view of U.S. Patent Application Publication No. 2002/0194388 to Boloker et al. [hereinafter Boloker].

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6. As to claim 1, Lucassen teaches the invention substantially as claimed including a system [MVC-based development system; p. 2, paragraph 0017], comprising:

a processor [p. 7, paragraph 0067];

a computer-accessible medium coupled to the processor, wherein the computer-accessible medium is configured to store program instructions executable by the processor [Tier-2 comprises the business logic that runs on a Web application server, Web server; p. 7, paragraph 0067; examiner notes that the MVC framework includes servers and a processor and memory to store program instructions are inherent to the servers] to implement an application program [a application 50, Fig. 5; p. 11, paragraph 0105] comprising:

one or more application modules [an application data layer 51, a business logic layer 52, an interaction logic layer 53 a customization layer 54, and application process 55; p. 11, paragraph 0105], wherein at least a first one of the application modules comprises a first dynamic component [interaction logic layer 53; p. 11 – 12, paragraph 0107] and a static component [application data layer 51 comprises data content, file services and databases, and comprises all of the backend information; p. 11, paragraph 0105], wherein the first dynamic component and the static component are configured to function according to an initial set of requirements for the application [ability of the

system to use the best possible combination of interface modalities based on the user's current preferences, needs and abilities as well as the application requirements and device capabilities; pp. 4 - 5, paragraph 0041]; and

a dynamic component generator configured to receive a new set of requirements [meta-data; p. 12, paragraph 0108] for the application and generate a second dynamic component to replace the first dynamic component [That dynamically generates an interaction logic layer and customization which is then adapted at runtime; p. 3, paragraph 0029], wherein the second dynamic component is configured to function according to the new set of requirements [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123].

Although Lucassen teaches the invention substantially, Lucassen does not specifically disclose determining whether the new set of requirements includes changes from the initial set of requirements and generating a second dynamic component to replace the first dynamic component if the new set of requirements includes changes from the initial set of requirements.

However, Boloker teaches a model-view-controller framework [paragraph 0061], determining whether the new set of requirements includes changes from the initial set of requirements [Automatic adaptation of the applications based...user preferences; p. 5, paragraph 0082] and If the new set of requirements includes changes from the initial set of requirements, generate a second dynamic component to replace the first dynamic component [If the user agent respects the requirement set in to update its focus when

instructed, the multi-modal shell 41 can update at the same time the XHTML-MP page; p. 14, paragraph 0188].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Boloker and Lucassen because Boloker's teaching provide the ability to dynamically update its choice of modalities based on what the user chooses to do [p. 5, paragraph 0081 of Boloker].

- 7. As to claim 2, Lucassen teaches the dynamic component generator does not change the static component in response to the new set of requirements [p. 11, paragraph 0105].
- 8. As to claim 3, Lucassen teaches the dynamic component generator is configured to generate a second dynamic component to replace the first dynamic component by modifying the first dynamic component in response to the new set of requirements [p. 15, paragraph 0146].
- 9. As to claim 4, Lucassen teaches the dynamic component generator is configured to replace the first dynamic component by overwriting the first dynamic component in the computer-accessible medium in response to the new set of requirements [interaction logic (some elements can be added, remove or replaced; p. 12, paragraph 0108].

10. As to claim 5, Lucassen teaches the new set of requirements is formatted according to an extensible Mark-up Language (XML) schema and stored in the computer-accessible medium [data models 22 (or data type primitives) are XML Schema compliant; p. 6, 0059].

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- 11. As to claim 6, Lucassen teaches the one or more application modules comprise a second application module comprising a static component and a dynamic component [p. 11, paragraph 0105].
- 12. As to claim 7, Lucassen teaches the dynamic component generator is configured to generate a new dynamic component [p. 3, paragraph 0029] for the second application module in response to receiving the new set of requirements [meta-data; p. 12, paragraph 0108].
- 13. As to claim 8, Lucassen teaches another dynamic component generator for the dynamic component of the second application module, wherein the other dynamic component generator is configured to generate a new dynamic component for the second application module [p. 3, paragraph 0029] in response to receiving a new set of requirements for the second application module [meta-data; p. 12, paragraph 0108].
- As to claim 11, Lucassen teaches the first application module is a model module 14. [Model M; p. 5, paragraph 0044], wherein the static component is a static data model

configured to function independent of an application data representation [p. 11, paragraph 0105], and wherein the dynamic component is a dynamic data model configured to function dependent upon the application data representation [p. 12, paragraph 0109 and p. 13, paragraph 0123] and according to a current set of application requirements [meta-data; p. 12, paragraph 0108] in response to the user input [p. 3, paragraph 0029].

- 15. As to claim 12, Lucassen teaches the dynamic data model comprises an Enterprise Java Bean (EJB) entity bean [p. 11, paragraph 0095].
- 16. As to claim 13, Lucassen teaches the new set of requirements indicates a change to the application data representation [p. 12, paragraph 0108], and wherein the dynamic component generator is configured to generate a new dynamic data model in response to the change to the application data representation [p. 12, paragraph 0109 and p. 13, paragraph 0123].
- 17. As to claim 14, Lucassen as modified teaches a method [p. 2, paragraph 0017 of Lucassen], comprising:

installing one or more application modules [an application data layer 51, a business logic layer 52, an interaction logic layer 53 a customization layer 54, and application process 55; p. 11, paragraph 0105 of Lucassen] each comprising a static component [application data layer 51 comprises data content, file services and

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databases, and comprises all of the backend information; p. 11, paragraph 0105 of Lucassen];

one or more dynamic component generators [interaction manager 57; p. 12, paragraph 0109 of Lucassen] receiving an initial set of requirements for the application modules [meta-data; p. 12, paragraph 0108 of Lucassen];

the one or more dynamic component generators [interaction manager 57; p. 12, paragraph 0109 of Lucassen] generating one or more initial dynamic components for the one or more application modules [That dynamically generates an interaction logic layer and customization which is then adapted at runtime; p. 3, paragraph 0029 of Lucassen], wherein the one or more initial dynamic components are configured to function according to the initial set of requirements [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123 of Lucassen];

receiving a new set of requirements for the application modules [meta-data; p. 12, paragraph 0108 of Lucassen];

determining whether the new set of requirements includes changes from the initial set of requirements [Automatic adaptation of the applications based...user preferences; p. 5, paragraph 0082 of Boloker]; and

if the new set of requirements includes changes from the initial set of requirements, generating one or more new dynamic components to replace the one or more initial dynamic components [If the user agent respects the requirement set in to update its focus when instructed, the multi-modal shell 41 can update at the same time

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the XHTML-MP page; p. 14, paragraph 0188 of Boloker], wherein the one or more new dynamic components are configured to function according to the new set of requirements [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123 of Lucassen].

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- 18. As to claim 16, Lucassen teaches the generating one or more new dynamic components comprises replacing the one or more initial dynamic components by the one or more new dynamic components by modifying the each of the one or more initial dynamic components in response to the new set of requirements [p. 15, paragraph 0146].
- 19. As to claim 17, Lucassen teaches the generating one or more new dynamic components comprises replacing the one or more initial dynamic components by the one or more new dynamic components by overwriting each of the one or more initial dynamic components in a computer-accessible medium in response to the new set of requirements [p. 12, paragraph 0108].
- 20. As to claim 18, Lucassen teaches the generating is performed by one or more dynamic component generators, wherein the one or more dynamic component generators are comprised within the same application as the one or more application modules [p. 3, paragraph 0029].

- 21. As to claim 19, Lucassen teaches the generating is performed by one or more dynamic component generators comprised within an application server container, wherein the application modules are comprised within the same application server container [interaction components 91, 92 register with the container 92 and the contact between the container 92 and components 90, 91 is programmed in the container 92; p. 15, paragraph 0151].
- 22. As to claim 20, Lucassen teaches the generating the static components comprised by the one or more application modules are not changed in response to the new set of requirements [p. 11, paragraph 0105].
- 23. As to claim 21, Lucassen teaches the new set of requirements is formatted according to an extensible Mark-up Language (XML) schema [data models 22 (or data type primitives) are XML Schema compliant; p. 6, 0059].
- 24. As to claim 24, Lucassen teaches one of the one or more application modules is a model module [Model M; p. 5, paragraph 0044], wherein the static component is a static data model configured to function independent of an application data representation [p. 11, paragraph 0105], and wherein a dynamic component generated for the one of the one or more application modules is a dynamic data model configured to function dependent upon the application data representation [p. 12, paragraph 0109].

and p. 13, paragraph 0123] and according to a current set of requirements [meta-data; p. 12, paragraph 0108] in response to the user input [p. 3, paragraph 0029].

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- 25. As to claim 25, Lucassen teaches the dynamic data model comprises an Enterprise Java Bean (EJB) entity bean [p. 11, paragraph 0095].
- 26. As to claim 26, Lucassen teaches receiving a new set of requirements indicating a change to the application data representation [p. 12, paragraph 0108]; and generating a new dynamic data model in response to the change to the application data representation [p. 12, paragraph 0109 and p. 13, paragraph 0123].
- 27. As to claim 27, Lucassen as modified teaches a method [p. 2, paragraph 0017 of Lucassen], comprising:

installing one or more application modules [an application data layer 51, a business logic layer 52, an interaction logic layer 53 a customization layer 54, and application process 55; p. 11, paragraph 0105 of Lucassen], wherein at least a first one of the application modules comprises a first dynamic component [interaction logic layer 53; p. 11 – 12, paragraph 0107 of Lucassen] and a static component [application data layer 51 comprises data content, file services and databases, and comprises all of the backend information; p. 11, paragraph 0105 of Lucassen], wherein the first dynamic component and the static component are configured to function according to an initial set of requirements for the application [pp. 4 – 5, paragraph 0041 of Lucassen];

one or more dynamic component generators [interaction manager 57; p. 12, paragraph 0109 of Lucassen] receiving a new set of requirements for the application modules [meta-data; p. 12, paragraph 0108 of Lucassen];

the one or more dynamic component generators [interaction manager 57; p. 12, paragraph 0109 of Lucassen] determining whether the new set of requirements includes changes from the initial set of requirements [Automatic adaptation of the applications based...user preferences; p. 5, paragraph 0082 of Boloker]; and

if the new set of requirements includes changes from the initial set of requires, the one or more dynamic component If the user agent respects the requirement set in to update its focus when instructed, the multi-modal shell 41 can update at the same time the XHTML-MP page; p. 14, paragraph 0188 of Boloker] generating a new dynamic component to replace the first dynamic component [That dynamically generates an interaction logic layer and customization which is then adapted at runtime; p. 3, paragraph 0029 of Lucassen], wherein the new dynamic component is configured to function according to the new set of requirements [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123 of Lucassen].

28. As to claim 28, Lucassen teaches the generating is performed by one or more dynamic component generators, wherein the one or more dynamic component generators are comprised within the same application server as the one or more application modules [p. 3, paragraph 0029].

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29. As to claim 29, Lucassen teaches the generating is performed by one or more dynamic component generator comprised within an application server container, wherein the one or more application modules are comprised within the same application server container [interaction components 91, 92 register with the container 92 and the contact between the container 92 and components 90, 91 is programmed in the container 92; p. 15, paragraph 0151].

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- 30. As to claim 30, Lucassen teaches in said generating, the static component does not change in response to the new set of requirements [p. 11, paragraph 0105].
- 31. As to claim 31, Lucassen teaches in said generating, the second dynamic component replaces the first dynamic component by modifying the first dynamic component in response to the new set of requirements [p. 15, paragraph 0146].
- 32. As to claim 32, Lucassen teaches in said generating, the second dynamic component replaces the first dynamic component by overwriting the first dynamic component in a computer-accessible medium in response to the new set of requirements [p. 12, paragraph 0108].
- 33. As to claim 33, Lucassen teaches wherein the new set of requirements is formatted according to an extensible Mark-up Language (XML) schema and stored in

the computer-accessible medium [data models 22 (or data type primitives) are XML Schema compliant; p. 6, 0059].

- 34. As to claim 34, Lucassen teaches wherein the one or more application modules comprise a second application module comprising a static component and a dynamic component [p. 11, paragraph 0105].
- 35. As to claim 35, Lucassen teaches generating a new dynamic component [p. 3, paragraph 0029] for the second application module in response to receiving the new set of requirements [meta-data; p. 12, paragraph 0108].
- 36. As to claims 38 40, these are similar in scope to claims 11 13; therefore, they are rejected for the same reasons as claims 11 13 above.
- 37. As to claims 41 48 and 51 53, these are product claims that correspond to system claims 1 8 and 11 13; note the rejections to claims 1 8 and 11 13 above, which also meet these product claims.
- 38. Claims 9, 10, 22, 23, 36, 37, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucassen and Boloker further in view of U.S. Patent Application Publication No. 2002/0109734 to Umezu et al. [hereinafter Umezu, cited in the previous office action].

39. As to claim 9, Lucassen as modified teaches the first application module is a controller module [Controllers C1, C2 and C3; p. 2, paragraph 0014 of Lucassen], wherein the dynamic component is an application logic component coupled [interaction logic layer 53; p. 11 – 12, paragraph 0107 of Lucassen], wherein the application logic component is configured to function according to a current set of application requirements in response to the user input [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123 of Lucassen]. Lucassen as modified does not disclose the static component as a router component configured to receive user input.

However, Umezu teaches model view controller includes allocating functions of GUI to an object (model) which stores a service, which is a core function of an application, and data, which is base of display, an object (view) for performing display, and an object (controller) receiving input from an input device, and operates GUI through cooperation of the view and the controller [p. 4, paragraph 0068], and a static component is a router component configured to receive user input [p. 14, paragraphs 0333 – 0336]

It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of a router component configured to receive user input as taught by Umezu to the invention of Lucassen as modified because this provides a GUI processing system which enables an operation of drag-and-drop providing visual feedback, allows undo of an operation of application with GUI, and

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allows redo of an undone operation of application with GUI [p. 2, paragraph 0021 of Umezu].

- 40. As to claim 10, Lucassen teaches the application logic component comprises an Enterprise Java Bean (EJB) session bean [p. 11, paragraph 0095].
- 41. As to claim 22, Lucassen as modified teaches one of the one or more application modules is a controller module [Controllers C1, C2 and C3; p. 2, paragraph 0014 of Lucassen], wherein the static component is a router component configured to receive user input [Controllers C1, C2 and C3; p. 2, paragraph 0014 of Umezu], and wherein a dynamic component generated for the one of the one or more application modules is an application logic component coupled to the router component [p. 4, paragraph 0068 of Umezu], wherein the application logic component is configured to function according to a current set of requirements in response to the user input [customization meta-data 54 and generates functional or customized presentations; p. 12, paragraph 0109 and p. 13, paragraph 0123 of Lucassen].
- 42. As to claim 23, Lucassen teaches the application logic component comprises an Enterprise Java Bean (EJB) session bean [p. 11, paragraph 0095].
- 43. As to claims 36 and 37, these are similar in scope to claims 22 and 23; therefore, they are rejected for the same reasons as claims 22 and 23 above.

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44. As to claims 49 – 50, these are product claims that correspond to system claims 9 and 10; note the rejection to claims 9 and 10 above, which also meet these product claims.

Conclusion

45. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONTACT INFORMATION

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen Examiner Art Unit 2194

LBZ

SUPERWISORY PATENT EXAMINER